

# Missouri Department of Conservation

# **Fellows Lake Managed Archery Deer Hunt**

A Special Management Hunt on Fellows Lake
(a City Utilities Property)

# **Proposed Management Plan**

# **Purpose**

The Fellows Lake Management Archery Deer Hunt is to provide proactive deer herd management, to prevent or reduce forest ecosystem damage caused by overabundant deer, and recreational opportunity to the general public. Hunters will be selected through the Missouri Department of Conservations managed deer hunt drawing system. This plan is to set forth the deer management goals agreed to by the Greater Springfield Metro Urban Deer Action Committee on the Fellows Lake property owned and managed by Springfield City Utilities.

#### **Point of Contact:**

# **Brad Jump**

Urban Wildlife Management Biologist 2630 North Mayfair Springfield, Missouri Telephone number: (417)895-6880

-or-

Steve Nelson City Utilities

# Scope of Plan

The development of this plan will be a cooperative effort between the Missouri Department of Conservation and Springfield City Utilities.

### **Planning**

# **Description of Proposed Area and Hunt Structure**

Fellows Lake is an 820 acre lake used as a drinking water supply. It was built in 1955 by impounding the Little Sac River. The lake is surrounded by 850 acres or 1.33 square miles of hunt-able deer habitat. The lake is also heavily sub-divided with several housing developments completely surrounding the lake.

The land that will be included into the managed hunting is a mix of hardwood forests and old field habitats.

Locally, both human and deer populations have grown. Greene County is the fifth most populous county in Missouri (USDC). The Greater Springfield Metro Area has grown over 250% since 1950 (Springfield Vision 20/20) and has grown over 9.8% since 2000, and 32% of Greene county residents live in unincorporated subdivisions surrounding Springfield proper (OSEDA). Expanding deer herds and increased suburban development have led to a higher incidence of deer-vehicle collisions (MSHP 2007), (Arnold 2008), landscape damage due to deer browse, and degraded habitat quality than is found in rural areas of the state. Deer-vehicle collisions are greater for areas of high deer densities, with Greene County seeing a very high number each year (MSHP 2007), (Arnold 2008).

Having too many deer leads to associated herd health and human health related issues (Piesman 2002)(Rand 2004). Deer often become more susceptible to diseases like Epizootic Hemorrhagic Disease (EHD) as happened around the Wilson Creek National Battlefield in 2006, where a deer population decline of around 55% was noted (Pietz 2006). Deer are known carriers of the ticks that cause diseases like Lyme disease (Spielman et al 1985) and are essential to the establishment and spread of this tick (Rand 2003), Rocky Mountain Spotted Fever, and Ehrilchiosis, and Southern Tick Associated Rash Illness, which can be transmitted to humans (Dawson et al 1994), although other small mammals may play an important role in tick borne disease transmission (Schulze 2005). The reduction of human cases of Lyme disease in relation to deer abundance was well documented in Mumford Cove Connecticut when controlled hunting was used to reduce the deer herd from 77 to 10 deer per square mile (Kilpatrick 2007) and when the deer population was reduced from 249 to 64 deer per square mile in Bridgeport Connecticut, the number of nymphal ticks collected was reduced by 92% (Kilpatrick 2007).

Deer spotlight surveys were conducted in the fall of 2008 and again in the spring of 2009 utilizing methods outlined by Farfarman and DeYoung (Farfarman et al 1986) to determine deer population on the Fellows Lake area. Surveys concluded that there were approximately 40 deer per square mile (twice the state recommended number of 15-20 deer per square mile). Assuming 40 deer per square mile, there are approximately 53 deer available for hunting. Pre-hunt and post hunt surveys will be conducted again in the fall of 2009 and the spring of 2010.

Using the statewide management goals of 15 - 20 deer per square mile, and consulting with the state deer biologist, we determined the goal is to harvest at least 20 of the female (doe) deer.

The managed hunt will run from November 1st, 2009, until December 31st, 2009.

Archery hunting has proven to be safe (Hansen 1997) and effective (Kilpatrick 1999) in managing deer numbers in urban and suburban areas (Kilpatrick 2004). In one Missouri situation, nine carefully selected archers safely removed 35 deer from a single property in only four days. In another instance, the Certified Bow Hunters of Saint Louis County, 6 active hunters from this group harvested 94 deer in the 2006-2007 hunting season on only 30 properties. This group has harvested 294 deer in five hunting seasons from two Saint Louis Counties greatly helping ease Human deer conflicts in these areas (Jump 2007). Because archery only managed hunts have a success rate of approximately 0.16 does/hunter (Hansen 1997), and because of the size of the management area, 30 hunters will be selected and issued two antlerless deer tags each.

This hunt will serve as a pilot program whereby it can be proven that urban/suburban hunting can effectively and safely take place on all Springfield City properties.

#### Safety

- Only archery equipment will be allowed. Hunters will be required to have taken and successfully passed the <u>Missouri Bow Hunter Education</u> course prior to the prehunt meeting. A special section on Urban Bow hunting will be covered. Failure to provide proof of Missouri Bow Hunter Education certification will result in the dismissal from the Fellows Lake managed deer hunt.
- 2. A proficiency shooting test will be administered. All hunters will have to score 90% at twenty yards shooting 10 shots.
- 3. Parking areas will be assigned to separate hunters.
- 4. Hunting will be allowed from elevated, temporary stands only.
- 5. Only ladders and steps that do not damage the tree will be allowed.
- 6. Hunters must wear an approved safety harness at all times (climbing and while in the stand).
- 7. Stands must be labeled with the hunters; name, address, phone number, and permit number.
- 8. Arrows must be marked with the hunters name and permit number.
- 9. Hunters will be required to wear a visible external tag.
- 10. Based on Hansen where archery deer hunter density for managed hunts has ranged from 13-57 hunters per square mile in Missouri (Hansen 1997), each hunter will be assigned a specific area (approximately 25 acres each) in which they are allowed to hunt.

#### Safety Briefing

1. Hunters <u>will be required</u> to attend a mandatory pre-hunt meeting, briefing safety and procedures conducted jointly by the Missouri Department of Conservation and Springfield City Utilities prior to the start of the hunt.

#### Methods

- 1. Only archery equipment will be allowed. No firearms will be allowed.
- 2. Only lethal broad-heads will be used
- 3. Hunters will be required to check in and out daily at the Fellows Lake check in facility, (located on farm road 183 shown on insert number 1).
- 4. No dogs will be allowed in the hunt, nor allowed on the area during the hunt.
- 5. Hunters must display a hang tag in their vehicle
- Deer must be covered with a tarp or approved equal prior to removal from the hunt area.
- 7. Parking areas will be assigned

#### **Bag Limit**

1. Two antierless deer only.

#### Monitoring

- 1. A pre hunt deer spotlight survey (October 2009) will be conducted.
- 2. Deer bagged must be checked in using state wide tele-check system, by 10 p.m. on the day of harvest.
- 3. Deer harvested must also be reported on the daily hunting card when checking out.
- 4. A post hunt deer spotlight survey (January 2010) will be conducted.

#### Season

1. The season will run from November 1<sup>st</sup>, 2009 until December 31<sup>st</sup>, 2009. Shooting hours will be 1/2 hour before sunrise to 1/2 hour after sunset.

#### **Permits**

Eligible sportsmen must meet these criteria for eligibility:

- Successful applicants for this hunt must hold a valid Missouri Managed Deer Hunt hunting license. Either a Resident (\$17) or Nonresident (\$225). Please provide the vendor with your Conservation number or Social Security number. <u>Only</u> a Managed Deer Hunting Permit is valid; <u>no</u> other deer hunting permit of any type can be used to participate in this hunt. Deer taken at this hunt <u>do not</u> count toward the hunter's season bag limit.
- 2. Applicants **must** be Missouri Bow Hunter Education certified by the mandatory orientation meeting on October 10, 2009 (date and location on following page).

#### **Application Procedure and Permit Notification**

- Hunters interested in participating in the Fellows Lake management hunt must apply via the state management hunt drawing system. This may be done by calling: (800) 829-2956 or visiting the following website: <a href="https://www.missouriconservation.org/hunt/deer">www.missouriconservation.org/hunt/deer</a>, by August 15<sup>th</sup>, 2009.
- Thirty permits will be randomly drawn for this managed hunt. Remember hunters must be able to prove that they have taken and passed the Missouri Bow Hunters education course.
- 3. Notification of successful applicants will be by mail. A packet of instructions will be mailed to each successful applicant after the drawing. Hunters will be required to attend an orientation meeting. This will be held on Saturday, October 10, 2009, at the Missouri Department of Conservations Southwest Regional Office (2630 N. Mayfair, Springfield, MO, 65803), at 10:00 a.m., to instruct participants on their assigned location and safety requirements during the hunt.

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Dear Hunter,

CONGRATULATIONS! You have been selected to participate in the Fellows Lake Managed Deer Hunt. Go to any permit vendor to purchase either a Resident (\$17) or Nonresident (\$225) Managed Deer Hunting Permit. Please provide the vendor with your Conservation number or Social Security number. <u>Only</u> a Managed Deer Hunting Permit is valid; <u>no</u> other deer hunting permit of any type can be used to participate in this hunt. Deer taken at this hunt <u>do not</u> count toward the hunter's season bag limit.

The 2009 Archery Deer Season will be here before you know it. The Missouri Department of Conservation Staff is preparing for the first managed hunt at Fellows Lake. The hunt will take place from November 1, 2009, until December 31, 2009.

#### Please read this information carefully as each item is important for you to know.

- Hunt days are November 1, 2009, until December 31, 2009, <u>NO FIREARMS ARE ALLOWED.</u>
- 2. You will hunt from a non-permanent elevated stand that does not damage trees. You will be required to wear an approved safety harness while climbing into/out of and while in the stand.
- 3. You must check in and out daily at the check in booth located at farm road 183 (shown on insert #1).
- 4. You must purchase the proper Missouri managed deer hunt, hunting license.
- You must comply with all State regulations that you will obtain when you purchase your deer license.
- 6. Hunters interested in participating in the Fellows Lake management hunt must apply via the state management hunt drawing system. This may be done by calling: (800) 829-2956 or visiting the following website: <a href="https://www.missouriconservation.org/hunt/deer">www.missouriconservation.org/hunt/deer</a>, by August 15<sup>th</sup>, 2009.
- 7. You will be notified if you have been selected by \_\_\_\_\_\_\_, 2009, and to give you final details, or you may check online at <a href="https://www.missouriconservation.org/hunt/deer">www.missouriconservation.org/hunt/deer</a>

If you have any questions, please feel free to give us a call at (417)895-6880.

Sincerely,

Brad Jump Urban Wildlife Management Biologist

Fellows Lake Managed Deer Hunt



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